



Acting for Bats

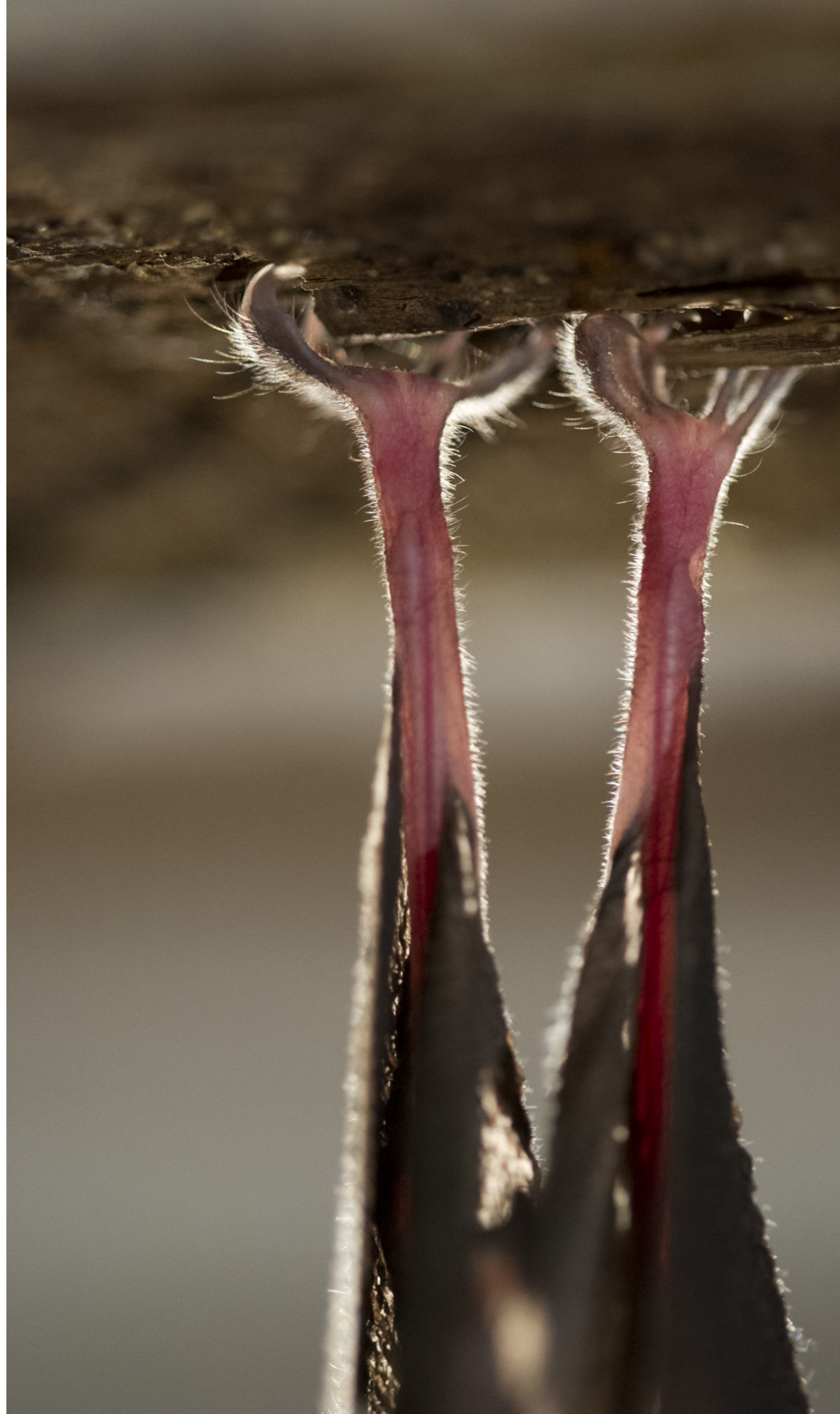
Back on 5 years of action
2009 - 2013

Protect
Improve knowledge
Support the networks
Train for public awareness



Ministry of Ecology, Sustainable Development and Energy

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SUMMARY

The National Action Plan

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- Improve knowledge of bat populations p 10 à 11
- Support networks for their conservation activities p 12 à 13
- Train for public awareness p 14 à 15
- Future p 16 à 17

Photographs/credits

Map of editors and leaders structures, of regional structures, of the national plan.

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This brochure presents the main actions carried out in France from 2009 to 2013 as part of the National Action Plan for the conservation of bats, its regional variations and other conservation programs. Its purpose is to provide an overview of the issues, solutions implemented, objectives and future prospects.

Metropolitan France is home to 34 species of bats with different habits and different ecology. Their life cycle includes several phases : hibernation, maternity and periods of spring and autumn transit. Each period is associated with specific needs in terms of habitats and foraging habitats. Bats play a vital role in the functioning of ecosystems and contribute to maintaining the balance of the natural environment particularly through the effective regulation of the numbers of nocturnal insects. Their presence and population dynamics tell us about some ecological characteristics of the environment or the impact and evolution of certain practices (bio-indicator species). Because of the specific and diverse ecology of the different bat species, keeping

them helps protect many groups (there are called umbrella species). Meanwhile, they face many threats from our human activities (direct mortality, fewer habitats and the decline in favorable foraging areas), so that the current numbers of bats are substantially lower than those of the 1950s. This makes cohabitation with humans necessary and essential.

An action plan for bats

As part of the National Biodiversity Strategy and Grenelle laws, the Ministry of Ecology, Sustainable Development and Energy (MEDDE) initiated a number of national action plans for threatened species including one concerning bats (PNAC). The latter, written by la Société Française pour l'Etude et la Protection des Mammifères (SFPEM), hosted by Fédération des Conservatoires d'espaces naturels (FCEN) and managed by Direction Régionale de l'Environnement, de l'Aménagement et du Logement de Franche-Comté (DREAL) was implemented between 2009 to 2013. It follows a first restoration plan (1999-2004). The objective of this program is the protection and conservation of the 34 bat species throughout the metropolitan French territory. 26 actions were carried out, each driven by a referent structure : FCEN, SFPEM, National Museum of Natural History (MNHN), Centre for Studies and expertise on risk, the environment, mobility and development (CEREMA), MEDDE, DREAL Franche-Comté, the Ministry of Culture, Museums of Natural History in Bourges and Geneva, National Forestry Office (ONF), National Office for Hunting and Wildlife (ONCFS) and National Health Security Agency for Food, Environmental and Occupational in Nancy (ANSES). These actions were defined in order to meet four main objectives : the protection of a network of roosts, foraging habitats and commuting routes, the improved knowledge of populations, the support for networks for their conservation, training and public awareness.

Main financial partners of conservation programs : Directions Régionales de l'Environnement de l'Aménagement et du Logement, Conseils Régionaux (Regional Council), Conseils Départementaux (Departmental Council), Ministry in charge of the environment and The European Union.

Additional programs

Two LIFE programs, implemented over the past five years : Life ChiroMed (PNR Camargue) and Life Plateau de Montselgues (PNR Monts d'Ardèche).

In 2014, Natura 2000 designated 132 sites for their interest in chiropterology.

The network of natural reserves includes two National Nature Reserves and 5 Regional Nature Reserves specific to bats.

Some regions are also developing local programs for the conservation of bats (Corsica, Picardy, Brittany ...)



35 employees and 3,200 volunteer days per year between 2009 and 2013 were needed for specific studies on bats.

22 regional plans, driven by DREAL, written and driven by local organisations (mainly associations).



PROTECT A NETWORK OF ROOSTS FORAGING HABITATS AND COMMUTING ROUTES



Roosts

Each year, new settlements are discovered through conservation programs and through the commitment of a dynamic network.

447 new protected roosts in France in five years.

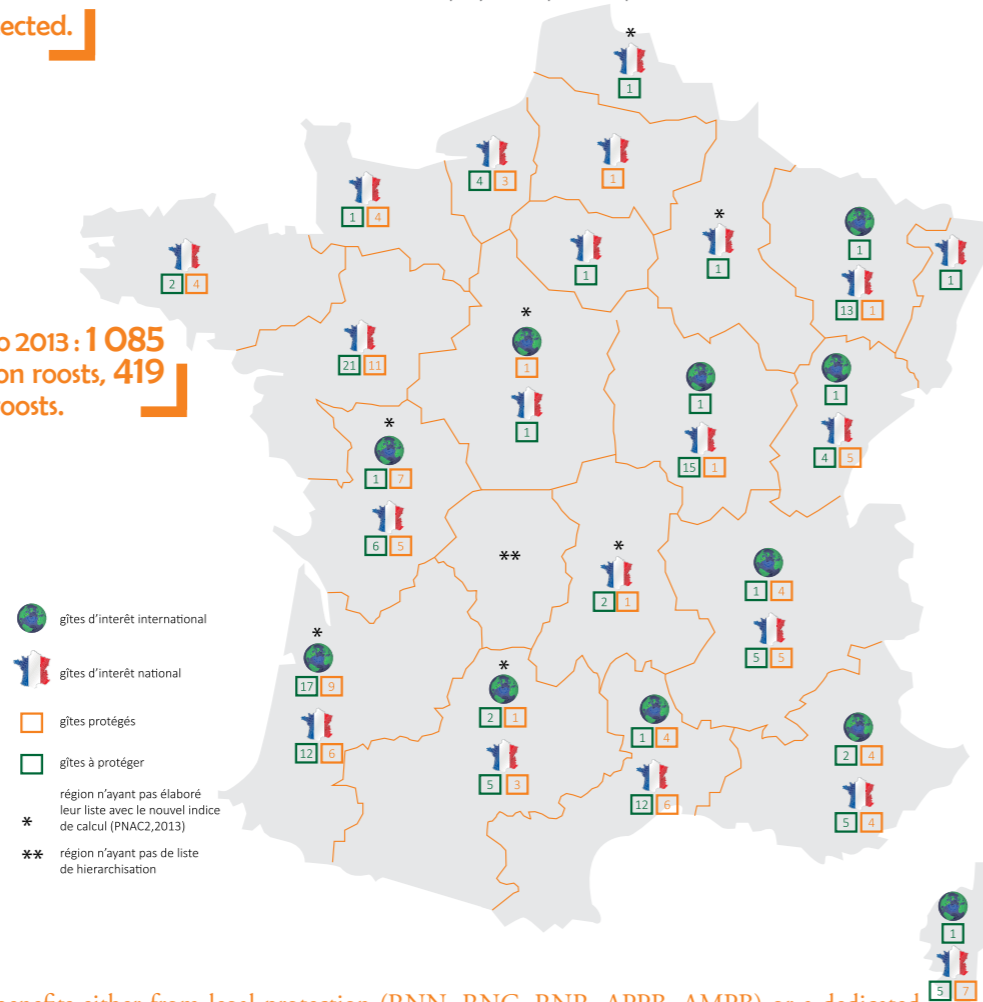
In order to target protective actions on roosts, a hierarchy has been developing since 1995. It lists the roosts according to their interest (international, national, regional, departmental or local). The index calculation was updated in 2013 (PNAC2, 2013) and a new list is available (see map below).

59 roosts of international interest and 182 roosts of identified national interest.

Map of already protected roosts and to be protected roosts of national and international interest. Added to these are roosts of regional, departmental and local interest that play an important part at these levels.

59% of roosts are still to be protected.

Discoveries in France from 2009 to 2013: 1 085 maternity roosts, 993 hibernation roosts, 419 transit roosts and 36 swarming roosts.



Focus on roosts in abandoned mines

The bulletin of 14 October 2009 stipulates that before any security setting can be started in abandoned mines*, a faunal expertise should be implemented during the complete life cycle of species.

From 2009 to 2013, 42 mines have benefited from faunistic expertise based on a complete life cycle.

A requirements specification was created following the faunistic expertise; these recommendations are provided by the chiropterologists to building owners.

Focus on roosts in historical monuments

The bulletin dating from 18 August 2010 encourages the consideration of bats in any development of historical monuments. Regional variations of PNAC have established partnerships with the Directions Régionales des Affaires Culturelles (DRAC) consequently making the surveys of monuments and their recommendations easier for the owners during the building works. DRAC/DREAL certificates were developed and feedback from the experience was gathered.

From 2009 to 2013, 344 historic monuments were surveyed, 39 have benefited from development in favour of bats, 120 value their presence. 34 colonies were discovered.

Focus on roosts in engineered structures

In the regions, agreements signed with Directions Interdépartementales des Routes ou les Conseils départementaux allow for the consideration of bats in the work carried out on engineered structures. Training sessions are organized by bats-supporting groups (Midi Pyrénées, PACA) for officials in charge of the maintenance of those structures. The integration of bats in the support software for the management of engineered structures (Lagora) and hosted by the CEREMA, is at the planning stage and will be a source of knowledge during future works through the PETRA base.

*old mining sites whose dealer no longer exists and for which responsibility now falls under the State.

*A roost is arbitrarily considered safe if it benefits either from legal protection (RNN, RNC, RNR, APPB, AMPB) or a dedicated property management (purchase, ENS, long leases) or physical protection or agreement signed with the site owners. These measures have different objectives and applications.

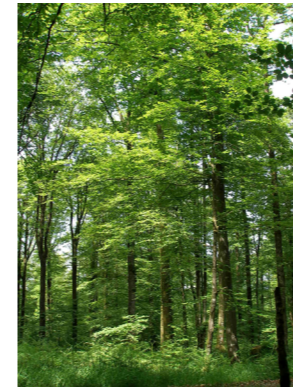
PROTECT A NETWORK OF ROOSTS FORAGING HABITATS AND COMMUTING ROUTES

Foraging habitats and commuting routes

10 500 days were dedicated to monitoring forests over 5 years. 500 forests were studied. 835 tree roosts were identified and maintained voluntarily. 74 forests have seen favourable management measures. 3 marteloscopes integrating the bat issue are used by forest professionals. More than 21 000 people have been educated through technical guides like the one made in Rhône Alpes.

The legislation has evolved, wind turbines are classified as ICPE legislation (Installation classified for environmental protection). A guide on the implementation of the regulations on protected species for onshore wind farms was developed by the MEDDE 2014.

757 wind farms have been identified in France since January 2014. A follow-up on 55 parks showed a mortality rate of 1000 bats from 2003 to 2014.



The foraging habitats and commuting routes must be considered for the effective protection of bats. The seventy telemetry studies carried out during the PNA have shown the use of different habitats by species. Their moves are often conditioned by the presence of linear woodlands, hedgerows, forest edges, riparian forests ; they may be impacted by transport networks, light pollution or large open fields.

Before 2009, bats conditions were not well considered in the projects concerning transport infrastructure. Over the 5-year implementation of the PNAC, 23 projects have been followed and funded by CEREMA, which complemented the experience feedback and allowed CEREMA to publish a technical guide. The guide follows a bibliographic report and a briefing note prepared by the CEREMA.

Forest management is both a foraging and a roost habitat area for many species. Many projects have been largely developed in the regions for 5 years to improve knowledge, to protect, track, manage and educate. A summary of these studies in the various areas related to forest habitats is now available.

The impact of wind turbines is significant for populations of bats. The pre-diagnosis protocols, diagnosis and mortality follow-up were made by SFEPM and are now available. Despite the effectiveness of certain mitigation measures, the recognition is not optimal.

Conservation Policies

All bat species are protected. On the national level, the Law of 23 April 2007 and its Decree of 15 September 2012, protect species and their habitats. On the European level, Directive (EEC No 92/43) "Habitats-Fauna-Flora" indicates that all species should receive strict protection (Annex IV) and 12 species require the designation of Special Areas of Conservation (Annex II). On the international level, all the species are protected under the Bern and Bonn Agreements. The latter led to the signing of the EUROBATS Agreement (4 December 1991) on the conservation of populations of bats in Europe. The global IUCN red list (2014) mentions two endangered species

whereas the one developed for Europe (2012) mentions five endangered species. On the national red list (2009), a species is "critically endangered" (Mehely's horseshoe bat), three are classified as "vulnerable" (Maghreb mouse-eared bat, Long-fingered bat, Schreiber's bent-winged bat) and seven are "almost endangered" (Mediterranean horseshoe bat, Nathusius' pipistrelle, Lesser mouse-eared bat, Leisler's bat, Common noctule, Bechstein's bat, Greater horseshoe bat).

Legend of Red List
 CR (critically endangered) LC (least concerned)
 EN (endangered) DD (data deficient),
 VU (vulnerable) VU (vulnerable)
 NT (near threatened) NA (not applicable)

Bats Protection and Conservation status

Sources : IUCN 2014 (world data) ; IUCN, 2012 (European data), IUCN, 2009 (French data)

English name	Latin name	Berne Convention (annex)	Bonn Convention (annex)	Habitats-Fauna-Flora Directive (annex)	World IUCN red list	European red list	French red list
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	II	II	II+IV	LC	NT	LC
Greater Horseshoe bat	<i>Rhinolophus ferrumequinum</i>	II	II	II+IV	LC	NT	NT
Mediterranean Horseshoe bat	<i>Rhinolophus euryale</i>	II	II	II+IV	NT	VU	NT
Mehely's horseshoe bat	<i>Rhinolophus mehelyi</i>	II	II	II+IV	VU	VU	CR
Daubenton's bat	<i>Myotis daubentonii</i>	II	II	IV	LC	LC	LC
Long-fingered bat	<i>Myotis capaccinii</i>	II	II	II+IV	VU	VU	VU
Pond bat	<i>Myotis dasycneme</i>	II	II	II+IV	NT	NT	NA
Whiskered bat	<i>Myotis mystacinus</i>	II	II	IV	LC	LC	LC
Brandt's bat	<i>Myotis brandtii</i>	II	II	IV	LC	LC	LC
Alcathoe bat	<i>Myotis alcathoe</i>	II	II	IV	DD	DD	LC
Bechstein's bat	<i>Myotis bechsteinii</i>	II	II	II+IV	NT	VU	NT
Natterer's bat	<i>Myotis nattereri</i>	II	II	IV	LC	LC	LC
Escalera's bat	<i>Myotis escaleraei</i>						DD
Geoffroy's bat	<i>Myotis emarginatus</i>	II	II	II+IV	LC	LC	LC
Greater mouse-eared bat	<i>Myotis myotis</i>	II	II	II+IV	LC	LC	LC
Maghreb mouse-eared bat	<i>Myotis punicus</i>	/	/	IV	NT	NT	VU
Lesser mouse-eared bat	<i>Myotis blythii</i>	II	II	II+IV	LC	NT	NT
Noctule	<i>Nyctalus noctula</i>	II	II	IV	LC	LC	NT
Leisler's bat	<i>Nyctalus leisleri</i>	II	II	IV	LC	LC	NT
Greater noctule	<i>Nyctalus lasiopterus</i>	II	II	IV	NT	DD	DD
Serotine	<i>Eptesicus serotinus</i>	II	II	IV	LC	LC	LC
Northern bat	<i>Eptesicus nilssonii</i>	II	II	IV	LC	LC	LC
Parti-coloured bat	<i>Vespertilio murinus</i>	II	II	IV	LC	LC	DD
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	III	II	IV	LC	LC	LC
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	II	II	IV	LC	LC	LC
Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>	II	II	IV	LC	LC	NT
Kuhl's pipistrelle	<i>Pipistrellus kuhlii</i>	II	II	IV	LC	LC	LC
Savi's Pipistrelle	<i>Hypsugo savii</i>	II	II	IV	LC	LC	LC
Brown long-eared bat	<i>Plecotus auritus</i>	II	II	IV	LC	LC	LC
Gray Big-eared Bat	<i>Plecotus austriacus</i>	II	II	IV	LC	LC	LC
Mountain Long-eared Bat	<i>Plecotus macrobullaris</i>	II	II	IV	LC	NT	DD
Western barbastelle bat	<i>Barbastella barbastellus</i>	II	II	II+IV	NT	VU	LC
Schreiber's bent-winged bat	<i>Miniopterus schreibersii</i>	II	II	II+IV	NT	NT	VU
European Free-tailed bat	<i>Tadarida teniotis</i>	II	II	IV	LC	LC	LC

IMPROVE KNOWLEDGE OF BAT POPULATIONS

Bats 2009- 2013



		NORTH			NORTH EAST				SOUTH EAST			SOUTH WEST			CENTRE		NORTH WEST			TOTAUX				
		ESCALERE	HAUTE-NORMANDIE	LE-DE-FRANCE	NORD-PAS-DE-CALAIS	ALSACE	LOTTRE	FRANCHE-COMTE	CHAMPAGNE-ARDENNE	CORSE	LANGUEDOC-ROUSSILLON	RHONE-ALPES	PIA	AQUITAINE	LIMOUSIN	MIDI-PYRENEES	BOURGOGNE	CENTRE	AUVERGNE	BASSE-NORMANDIE	BRETAGNE	COTE-D'OR	PAYS-DE-LA-LOIRE	TOTAUX
Greater Horseshoe bat	breeding (number of females)	692	151		54		3723	2051	860	1000	1500	3450	3018	4369	551	4806	1253	2457	1800	801	5275	2220	3520	43551
	breeding (%)	2%	0%		0%		9%	5%	2%	2%	3%	8%	7%	10%	1%	11%	3%	6%	4%	2%	12%	5%	8%	100%
	hibernation season (number of bats)	1137	569	64	124	2	5089	1750	2388	500	4200	2000	733	8228	898	10780	3581	5226	800	2958	6078	7000	7170	71275
	hibernation season (%)	2%	1%	0%	0%	0%	7%	2%	3%	1%	6%	3%	1%	12%	1%	15%	5%	7%	1%	4%	9%	10%	10%	100%
Mediterranean Horseshoe bat	breeding (number of females)							200		1000	6000	117	7794	285	13204	24	800						1970	32394
	breeding (%)							1%		3%	19%	3%	0%	24%	1%	41%	0%	2%				6%		100%
	hibernation season (number of bats)							151		300	3600	900	50	4354	381	8355	8	394	30				780	19338
	hibernation season (%)							1%		2%	19%	5%	0%	23%	2%	43%	0%	2%	0%				4%	0%
Lesser horseshoe bat	breeding (number of females)	2784	34	40		107	5303	3201	1760	10000	3200	3500	4472	7449	248	5827	6519	1671	3500	508	2246	470	770	63609
	breeding (%)	4%	0%	0%		0%	8%	5%	3%	16%	5%	6%	7%	12%	0%	9%	10%	3%	6%	1%	4%	1%	1%	100%
	hibernation season (number of bats)	5470	250	207	5	13	1881	1950	1577	1000	2000	3000	470	3448	772	4499	4063	3084	1000	932	353	1395	1405	38774
	hibernation season (%)	14%	1%	1%	0%	0%	5%	5%	4%	3%	5%	8%	1%	9%	2%	12%	10%	8%	3%	2%	1%	4%	4%	100%
Mehely's horseshoe bat	breeding (number of females)																							0
	breeding (%)																							0%
	hibernation season (number of bats)																							0
	hibernation season (%)																							0%
Long-fingered bat	breeding (number of females)									1000	4000	1200	1445											7645
	breeding (%)									13%	52%	16%	19%											100%
	hibernation season (number of bats)									10	280	74	444											808
	hibernation season (%)									1%	35%	9%	55%											100%
Pond bat	breeding (number of females)				35																			35
	breeding (%)				100%																			100%
	hibernation season (number of bats)				10																			10
	hibernation season (%)				100%																			100%
Bechstein's bat	breeding (number of females)				65	65	107	70		230		1200	145	34		94	44		50					2104
	breeding (%)				3%	3%	5%	3%		11%		57%	7%	2%		4%	2%		2%					100%
	hibernation season (number of bats)	118	43	10	55	50	89	15	130	0	2	51	40	146		35	130	206	20	55	36	20	185	1436
	hibernation season (%)	8%	3%	1%	4%	3%	6%	1%	9%	0%	0%	4%	3%	10%		2%	9%	14%	1%	4%	3%	1%	13%	100%
Maghreb mouse-eared bat	breeding (number of females)									3000														3000
	breeding (%)									100%														100%
	hibernation season (number of bats)																							0
	hibernation season (%)																							0%
Greater mouse-eared bat	breeding (number of females)	589	411	98	110	9434	19881	6200	6475		1300	3800	1755	3364	2536		8083	9464	8000	3356	1125	2860	3640	92481
	breeding (%)	1%	0%	0%	0%	10%	21%	7%	7%		1%	4%	2%	4%	3%		9%	10%	9%	4%	1%	3%	4%	100%
	hibernation season (number of bats)	640	674	330	45	1046	1912	415	695		100		236	674	447		4899	5909	1000	2920	843	1080	1540	25405
	hibernation season (%)	3%	3%	1%	0%	4%	8%	2%	3%		0%		1%	3%	2%		19%	23%	4%	11%	3%	4%	6%	100%
Lesser mouse-eared bat	breeding (number of females)									70														11173
	breeding (%)									1%														100%
	hibernation season (number of bats)									5														934
	hibernation season (%)									1%														100%
Western barbastelle bat	breeding (number of females)							60	260	30	200	1767	65	510		723	840	1052	800					6307
	breeding (%)							1%	4%	0%	3%	28%	1%	8%		11%	13%	17%	13%					100%
	hibernation season (number of bats)	2	9		26	370	690	1680	485		50	1608	27	2622	108	84	362	127	1000	215	9	650	1335	11459
	hibernation season (%)	0%	0%		0%	3%	6%	15%	4%		0%	14%	0%	23%	1%	1%	3%	1%	9%	2%	0%	6%	12%	100%
Schreiber's bent-winged bat	breeding (number of females)							5500		10000	30000	12000	10160	19173	3430	17200							4100	111563
	breeding (%)							5%		9%	27%	11%	9%	17%	3%	15%							4%	100%
	hibernation season (number of bats)					1	1	13800		5000	60000	24000	20146	11937	835	33476	13	1	1			1	10021	179234
	hibernation season (%)					0%	0%	8%		3%	33%	13%	11%	7%	0%	19%	0%	0%	0%			0%	6%	0%
Geoffroy's bat	breeding (number of females)	687	1370	117	480	329	3520	3250	720	10000	3500	15000	5524	8158	740	5245	3474	3036	800	1031	2315	3800	8280	81376
	breeding (%)	1%	2%	0%	1%	0%	4%	4%	1%	12%	4%	18%	7%	10%	1%	6%	4%	4%	1%	1%	3%	5%	10%	100%
	hibernation season (number of bats)	2400	687	203	550	446	1033	350	1365		25	82	296	3056	1134	413	2071	16003	30	1272	188	4080	7090	42774
	hibernation season (%)	6%	2%	0%	1%	1%	2%	1%	3%		0%	0%	1%	7%	3%	1%	5%	37%	0%	3%	0%	10%	17%	100%
Big sized bat	breeding (number of females)												15000		9027		9408							33435
	breeding (%)												45%		27%		28%							100%
	hibernation season (number of bats)												500		392		469							1361
	hibernation season (%)												37%		29%		34%							100%

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Get to know the different species

Some significant gaps still exist but knowledge is paramount. Several studies have been undertaken to improve knowledge of the foraging habitats, swarming phenomenon or migration. In 2009, a new species was discovered in France, called Escalera's bat (*Myotis escaleraei*; Evin et al, 2009). In 2012, the first reproduction evidence of the Great noctule in Midi-Pyrénées and Auvergne were discovered. The Nord-Pas-de-Calais discovered a maternity colony of Pond bats.

14 regions centralise data at their level and a national database project is under way, coordinated by SFEPM. In 2014, 72% of districts revealed at least one bat data against 61% en 2009.

11

Hibernation sites and maternity monitoring protocols are currently being drafted to harmonize the nature of data, in order to compare them. A charter of good conduct on monitoring roosts has been drafted.

The centralisation of naturalistic data is one of the main stages of knowledge ; it allows compilation, synthesis, analysis ...

The synthesis work is also convincing with the publication of seven regional atlases in 5 years (Alsace, Aquitaine, Champagne-Ardenne, Corsica, Lorraine, Midi-Pyrénées and Rhône-Alpes).

The numbers of species in Appendix II of DHFF - Winter Data 2007-2008 to 2012-2013 and Summer 2007 to Summer 2012 (best score the last 5 years, otherwise a figure of maximum 10 years)

SUPPORT NETWORKS FOR THEIR CONSERVATION ACTIVITIES



53 trainers are spread across the 22 regions, and were trained during an internship in 2012. **217** people participated in one of **13** academic courses to practice catching techniques. These courses were implemented in the regions (18 regions).

A system of capture training was created in 2013 (in addition to training implemented since 2007 by the ONF for its officers) addressing the technical and ethical aspects through theoretical courses, permanent practical training, through a training book, and skills validating internships. A charter of ethics and an Engagement note of health risks and technical specifications for the field were developed and disseminated to standardise practices. This action was undertaken by the MNHN and Regional Chiropter Groups.

From 2009 to 2013, **580** people participated in a regional training course on ultrasound.

A national training course aimed at trainers in acoustic detection was organised in 2011 and 2014 in order to harmonise practices and to offer annual standardised training in the regions.

A catalogue for detectors is available.

Monitoring networks

Over 5 years, SOS Chauve-souris represented : **8 850** phone calls and **2 300** trips. Balance sheets are available in the regions and the SOS Chauve-souris network is available on the website of the SFPEM.

SOS chauves-souris

In each region / department, volunteers and employees respond to numerous requests from people seeking advice related to cohabitation with bats or reports of dead or injured animals.

1580 analyses were conducted between 2009 and 2014, **27** Serotine bats and **2** Natterer's bats were shown infected with the rabies virus.

Epidemiological surveillance of rabies

ANSES Nancy is in charge of monitoring rabies in bats in France. The chiropterologist network is involved in this monitoring and sends off any dead body for analysis.

Since 2009, **11** incidents have been reported, mainly among Schreiber's bent-winged bats and Greater mouse-eared bats. The most important case being the mortality of **140** individuals.

Abnormal mortality

Following high mortality among Schreiber's bent-winged bats in 2002 (about 50% of the population), a warning system has been developing since 2013, the Monitoring of Abnormal Mortality of Bats (SMAC). An emergency procedure was implemented to govern the process, from collection to analysis of dead bodies by the local veterinary laboratories and specialized laboratories. Each region has a designated SMAC representative who centralises and warns of any abnormal mortality.

To better understand the causes of death, a review of the effect of chemicals on bats was drafted by the University of Franche-Comté.

Contacts

Two centres bring together all the bibliographic resources :
 At national level : Museum of Natural History in Bourges www.museum-bourges.net/
 At international level : Museum of Natural History in Geneva <http://www.ville-ge.ch/musinfo/bd/mhng/cco/recherche.php/>

Since 2009 an agreement with the CNF has controlled the borrowing of documents. (To order : Register with contact@pole-tourbieres.org).

TRAIN FOR PUBLIC AWARENESS



Train local trades people

Many trades are in frequent contact with bats. In order to raise awareness of species conservation issues amongst these professionals, the chiropterologists provide numerous training courses in each region.

An agreement FCEN / French Federation of Speleology was signed
An agreement FCEN / Ministry of Defense (MINDEF) was signed (brochure available).

1 948 people were trained during more than 230 days of training over the past 5 years with a varied public : research departments, regional committees of caving, regional centres of forest land, directions interdepartementales des routes (Highways agency), directions régionales des affaires culturelles (regional department for cultural affairs), directions départementales des transports (department for transport), local authorities, ONF, Office National de l'Eau et des Milieux Aquatiques (Water and wetlands services regulation authority), regional parcs...

General public

The international night of the bat (last weekend of August) helps to educate the general public every year. (<http://www.nuitdelachauvesouris.com/>).

Started in 2005 in Brittany, shelters for bats have been growing in France since its launch in 2012. The program aims to educate individuals and communities that host colonies or improve the potential of the hosting of species. (<http://www.sfepm.org/refugepourleschauvesouris.htm>).

From 2009 to 2013, more than 36 730 people attended the 911 nights of the bat organized in metropolitan and off shore regions.

Up until 2014, 337 Shelters (roosts) for bats have been implemented.

Training

Every year :

Two specific trainings courses about bats, intended for nature professionals, have been provided by the ATEN. (<http://www.espaces-naturels.fr/Formation>).

Each year, L'institut pour le Développement Forestier (Institute for Forest Development) provides a national "Forest management and Bats" training course.

Le CPIE Brenne Berry holds an annual training course on the identification and the acoustic ecology of bats.

Regional trainings courses on the acoustic ecology

Regional trainings courses on the system of capture to professionals by MNHN and the Bats' groups.

Developed educational tools

Many educational tools have been developed : educational kits, about thirty exhibitions, 20 regional awareness brochures, for which a summary is available.

Various awareness campaigns were held at national and regional levels such as : on the Day of the Night, the International Year of the Bat (2011/2012), the publication of stamps dedicated to bats, press articles (34 articles by the PNA), the creation of a national brochure, and developing awareness for schools etc...





Five years of action for Bats : a step forward in terms of knowledge, know-how, sharing, protections and innovations ... However, it is important that all of these actions carried out regionally and at national level do not lose momentum. **More than 300 structures were involved in France** : national leaders from PNAC (FCEN, SFEPM, MNHN, DREAL Franche-Comté, ONF, ONCFS, Natural History Museum of Bourges, Natural History Museum of Geneva, CEREMA, ANSES, Ministry for Ecology, Ministry of Culture), leaders of regional plans and regional network associations for nature protection, the French Federation of Speleology and its federated clubs, le Centre National de la Propriété forestière and its regional centres, les DREAL, les DRAC, les Directions Départementales des Territoires, le Ministère de la Défense (Ministry of defense), les Conseils régionaux (Regional councils), les Conseils départementaux (Departmental councils), the European Union, engineering offices, l'Atelier Technique des Espaces Naturels, regional nature parks, national parks, nature reserves, local organisations of Natura 2000 ... **along with individuals, farmers, forest owners, naturalists, cavers and especially the numerous**

volunteers ... The momentum in favour of bats is an answer to the **conservation needs** of these species that up to a few years ago were not really taken into consideration. The continuation of these actions will depend upon the **maintenance of a multi-partnership** approach and by the commitment of technical and financial partners with a network of committed chiropterologists. **A next action plan and pursuit of other programs** will help maintain and reinforce this dynamic. Many actions are yet to be led on **improving knowledge on certain topics** (shelter research, windfarming, forest species, population dynamics ...) **as well as monitoring, protection and awareness.** The land management measures for bats must be implemented to maintain the beneficial coexistence between men and bats and to ensure sustainable maintenance of the bat populations.



All documents can be found on

- www.plan-actions-chiropteres.fr
- <http://www.sfepm.org/chiropteres.htm>

Find out more

- Arthur L., Lemaire M., 2015.**
Les chauves-souris de France, Belgique, Luxembourg et Suisse (éditions Biotope, MNHN) - IIème Edition.
- Dietz C., Kiefer A., 2016.**
Bats of Britain and Europe (Bloomsbury, Natural History).
- Regional Bat Atlas.**

- [www.plan-actions-chiropteres.fr/Bilan-technique-et-financier-des-5-ans-du-PNA-2009-2013 \(BILAN FINAL\)](http://www.plan-actions-chiropteres.fr/Bilan-technique-et-financier-des-5-ans-du-PNA-2009-2013%20(BILAN%20FINAL))
- www.developpement-durable.gouv.fr/-Especes-menacees-les-plans-.html

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National pilot programme





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